

Iron and Steel Mills: 2002

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2002 Economic Census

Manufacturing

Industry Series



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U.S. Department of Commerce
Economics and Statistics Administration
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-- Not applicable for this report.

Table 1. Historical Statistics for the Industry: 2002 and Earlier Years

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry and year ¹	Com- panies ²	All estab- lish- ments ³	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
			Number ⁴	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
331111, Iron and steel mills 2002..	283	373	118 847	6 234 371	93 182	195 764	4 719 850	18 276 894	28 953 463	47 170 847	1 593 365
2001..	N	N	128 556	6 612 839	100 769	284 764	4 954 290	16 147 687	28 670 716	45 820 902	1 520 681
2000..	N	N	140 580	7 461 982	111 080	242 724	5 636 071	20 271 806	32 087 711	52 068 353	2 070 711
1999..	N	N	138 995	7 193 490	109 164	238 089	5 432 298	21 471 531	30 584 744	52 234 527	2 230 038
1998..	N	N	144 723	7 501 782	113 737	246 519	5 654 675	23 853 178	31 836 630	55 614 780	2 582 615
1997..	191	273	146 215	7 450 380	114 865	252 629	5 649 360	24 868 550	32 324 688	56 994 468	2 604 676

¹Statistics presented for years ending in 2 and 7 are census data. Interim census years are derived in a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures (ASM).

²For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

³Includes establishments with payroll at any time during the year.

⁴Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 2. Industry Statistics for Selected States: 2002

[States that are a disclosure or with less than 100 employees are not shown. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

Industry and geographic area	E ¹	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ³	Hours (1,000)	Wages (\$1,000)				
331111, Iron and steel mills												
United States	—	373	273	118 847	6 234 371	93 182	195 764	4 719 850	18 276 894	28 953 463	47 170 847	1 593 365
Illinois	—	30	24	6 394	307 075	5 086	10 059	231 222	802 782	1 094 837	1 904 250	46 091
Indiana	—	25	25	23 717	1 327 633	18 469	38 506	1 017 173	4 907 163	5 969 682	10 975 544	303 415
Ohio	—	48	40	19 483	1 000 519	15 706	34 101	800 723	2 352 303	4 397 364	6 680 584	204 811
Tennessee	—	9	4	607	31 218	464	915	20 879	78 331	206 474	284 560	7 652
Texas	—	20	13	4 911	245 208	3 769	7 690	176 503	647 035	1 132 575	1 768 976	66 938

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 3. Detailed Statistics by Industry: 2002

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Item	Value
331111, Iron and steel mills	
Companies ¹	number.. 283
All establishments ²	number.. 373
Establishments with 1 to 19 employees	number.. 100
Establishments with 20 to 99 employees	number.. 116
Establishments with 100 employees or more	number.. 157
All employees ³	number.. 118 847
Total compensation	\$1,000.. 8 907 839
Annual payroll	\$1,000.. 6 234 371
Total fringe benefits	\$1,000.. 2 673 468
Production workers, average for year	number.. 93 182
Production workers on March 12	number.. 93 430
Production workers on May 12	number.. 94 037
Production workers on August 12	number.. 93 446
Production workers on November 12	number.. 91 745
Production worker hours	1,000.. 195 764
Production worker wages	\$1,000.. 4 719 850
Total cost of materials	\$1,000.. 28 953 463
Materials, parts, containers, packaging, etc., used	\$1,000.. 23 635 359
Resales	\$1,000.. 161 774
Purchased fuels	\$1,000.. 1 938 840
Purchased electricity	\$1,000.. 1 803 964
Contract work	\$1,000.. 1 413 526
Quantity of electricity purchased for heat and power	1,000 kWh.. 54 254 802
Quantity of electricity generated less sold for heat and power	1,000 kWh.. D
Total value of shipments	\$1,000.. 47 170 847
Primary products value of shipments	\$1,000.. 44 769 141
Secondary products value of shipments	\$1,000.. 1 900 131
Total miscellaneous receipts	\$1,000.. 501 575
Value of resales	\$1,000.. 175 042
Contract receipts	\$1,000.. 183 346
Other miscellaneous receipts	\$1,000.. 143 187
Primary products specialization ratio	percent.. 96
Value of primary products shipments made in all industries	\$1,000.. 45 214 808
Value of primary products shipments made in this industry	\$1,000.. 44 769 141
Value of primary products shipments made in other industries	\$1,000.. 445 667
Coverage ratio	percent.. 99
Value added	\$1,000.. 18 276 894
Total inventories, beginning of year	\$1,000.. 7 958 772
Finished goods inventories	\$1,000.. 2 704 506
Work-in-process inventories	\$1,000.. 2 585 026
Materials and supplies inventories	\$1,000.. 2 669 240
Total inventories, end of year	\$1,000.. 8 254 130
Finished goods inventories	\$1,000.. 2 639 864
Work-in-process inventories	\$1,000.. 2 709 178
Materials and supplies inventories	\$1,000.. 2 905 088
Gross value of depreciable assets (acquisition costs) at beginning of year	\$1,000.. 39 332 777
Total capital expenditures (new and used)	\$1,000.. 1 593 365
Buildings and other structures (new and used)	\$1,000.. 148 962
Machinery and equipment (new and used)	\$1,000.. 1 444 403
Automobiles, trucks, etc., for highway use	\$1,000.. 16 878
Computers and peripheral data processing equipment	\$1,000.. 42 932
All other expenditures for machinery and equipment	\$1,000.. 1 384 593
Total retirements	\$1,000.. 854 850
Gross value of depreciable assets at end of year	\$1,000.. 40 071 292
Depreciation charges during year	\$1,000.. 2 179 919
Total rental payments	\$1,000.. 271 989
Buildings and other structures	\$1,000.. 84 162
Machinery and equipment	\$1,000.. 187 827
Total other expenses ⁴	\$1,000.. 2 513 540
Response coverage ratio ⁵	percent.. 70
Repair and maintenance services of buildings and/or machinery ⁴	\$1,000.. 925 448
Communications services ⁴	\$1,000.. 27 103
Legal services ⁴	\$1,000.. 40 247
Accounting, auditing, and bookkeeping services ⁴	\$1,000.. 14 804
Advertising and promotional services ⁴	\$1,000.. 7 083
Expensed computer hardware and supplies and purchased computer services ⁴	\$1,000.. 44 405
Refuse removal (including hazardous waste) services ⁴	\$1,000.. 175 455
Management consulting and administrative services ⁴	\$1,000.. 99 576
Taxes and license fees ⁴	\$1,000.. 188 481
All other expenses ⁴	\$1,000.. 990 937

See footnotes at end of table.

Table 3. Detailed Statistics by Industry: 2002—Con.

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Item	Value
3311111, Iron and steel mills - fully integrated	
Companies ¹	number.. N
All establishments ²	number.. 9
Establishments with 1 to 19 employees	number.. —
Establishments with 20 to 99 employees	number.. —
Establishments with 100 employees or more	number.. 9
All employees ³	number.. 32 740
Total compensation	\$1,000.. 2 837 123
Annual payroll	\$1,000.. 1 845 519
Total fringe benefits	\$1,000.. 991 604
Production workers, average for year	number.. 26 199
Production workers on March 12	number.. 26 299
Production workers on May 12	number.. 26 244
Production workers on August 12	number.. 26 252
Production workers on November 12	number.. 26 001
Production worker hours	1,000.. 56 271
Production worker wages	\$1,000.. 1 439 328
Total cost of materials	\$1,000.. 7 880 667
Materials, parts, containers, packaging, etc., used	\$1,000.. 6 399 750
Resales	\$1,000.. D
Purchased fuels	\$1,000.. 699 925
Purchased electricity	\$1,000.. D
Contract work	\$1,000.. 463 937
Quantity of electricity purchased for heat and power	1,000 kWh.. 7 672 832
Quantity of electricity generated less sold for heat and power	1,000 kWh.. D
Total value of shipments	\$1,000.. 12 450 695
Primary products value of shipments	\$1,000.. X
Secondary products value of shipments	\$1,000.. D
Total miscellaneous receipts	\$1,000.. X
Value of resales	\$1,000.. D
Contract receipts	\$1,000.. X
Other miscellaneous receipts	\$1,000.. X
Primary products specialization ratio	percent.. D
Value of primary products shipments made in all industries	\$1,000.. X
Value of primary products shipments made in this industry	\$1,000.. X
Value of primary products shipments made in other industries	\$1,000.. X
Coverage ratio	percent.. X
Value added	\$1,000.. 4 606 665
Total inventories, beginning of year	\$1,000.. 2 268 537
Finished goods inventories	\$1,000.. 740 020
Work-in-process inventories	\$1,000.. 822 263
Materials and supplies inventories	\$1,000.. 706 254
Total inventories, end of year	\$1,000.. 2 295 446
Finished goods inventories	\$1,000.. 740 242
Work-in-process inventories	\$1,000.. 858 678
Materials and supplies inventories	\$1,000.. 696 526
Gross value of depreciable assets (acquisition costs) at beginning of year	\$1,000.. X
Total capital expenditures (new and used)	\$1,000.. X
Buildings and other structures (new and used)	\$1,000.. X
Machinery and equipment (new and used)	\$1,000.. X
Automobiles, trucks, etc., for highway use	\$1,000.. X
Computers and peripheral data processing equipment	\$1,000.. X
All other expenditures for machinery and equipment	\$1,000.. X
Total retirements	\$1,000.. X
Gross value of depreciable assets at end of year	\$1,000.. X
Depreciation charges during year	\$1,000.. X
Total rental payments	\$1,000.. X
Buildings and other structures	\$1,000.. D
Machinery and equipment	\$1,000.. D
Total other expenses ⁴	\$1,000.. X
Response coverage ratio ⁵	percent.. X
Repair and maintenance services of buildings and/or machinery ⁴	\$1,000.. X
Communications services ⁴	\$1,000.. X
Legal services ⁴	\$1,000.. X
Accounting, auditing, and bookkeeping services ⁴	\$1,000.. X
Advertising and promotional services ⁴	\$1,000.. X
Expensed computer hardware and supplies and purchased computer services ⁴	\$1,000.. X
Refuse removal (including hazardous waste) services ⁴	\$1,000.. X
Management consulting and administrative services ⁴	\$1,000.. X
Taxes and license fees ⁴	\$1,000.. X
All other expenses ⁴	\$1,000.. X

See footnotes at end of table.

Table 3. Detailed Statistics by Industry: 2002—Con.

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Item	Value
3311113, Iron and steel mills - partially integrated without blast furnace	
Companies ¹	number.. N
All establishments ²	number.. 48
Establishments with 1 to 19 employees	number.. —
Establishments with 20 to 99 employees	number.. 1
Establishments with 100 employees or more	number.. 47
All employees ³	number.. 25 769
Total compensation	\$1,000.. 1 856 741
Annual payroll	\$1,000.. 1 422 649
Total fringe benefits	\$1,000.. 434 092
Production workers, average for year	number.. 20 289
Production workers on March 12	number.. 20 244
Production workers on May 12	number.. 20 353
Production workers on August 12	number.. 20 252
Production workers on November 12	number.. 20 295
Production worker hours	1,000.. 41 764
Production worker wages	\$1,000.. 1 073 585
Total cost of materials	\$1,000.. 7 637 422
Materials, parts, containers, packaging, etc., used	\$1,000.. 6 396 006
Resales	\$1,000.. D
Purchased fuels	\$1,000.. 336 357
Purchased electricity	\$1,000.. D
Contract work	\$1,000.. 92 387
Quantity of electricity purchased for heat and power	1,000 kWh.. 26 317 524
Quantity of electricity generated less sold for heat and power	1,000 kWh.. D
Total value of shipments	\$1,000.. 11 991 873
Primary products value of shipments	\$1,000.. X
Secondary products value of shipments	\$1,000.. D
Total miscellaneous receipts	\$1,000.. X
Value of resales	\$1,000.. D
Contract receipts	\$1,000.. D
Other miscellaneous receipts	\$1,000.. X
Primary products specialization ratio	percent.. D
Value of primary products shipments made in all industries	\$1,000.. X
Value of primary products shipments made in this industry	\$1,000.. X
Value of primary products shipments made in other industries	\$1,000.. X
Coverage ratio	percent.. X
Value added	\$1,000.. 4 470 244
Total inventories, beginning of year	\$1,000.. 1 810 306
Finished goods inventories	\$1,000.. 649 594
Work-in-process inventories	\$1,000.. 494 773
Materials and supplies inventories	\$1,000.. 665 939
Total inventories, end of year	\$1,000.. 2 011 160
Finished goods inventories	\$1,000.. 699 854
Work-in-process inventories	\$1,000.. 560 306
Materials and supplies inventories	\$1,000.. 751 000
Gross value of depreciable assets (acquisition costs) at beginning of year	\$1,000.. X
Total capital expenditures (new and used)	\$1,000.. X
Buildings and other structures (new and used)	\$1,000.. X
Machinery and equipment (new and used)	\$1,000.. X
Automobiles, trucks, etc., for highway use	\$1,000.. X
Computers and peripheral data processing equipment	\$1,000.. X
All other expenditures for machinery and equipment	\$1,000.. X
Total retirements	\$1,000.. X
Gross value of depreciable assets at end of year	\$1,000.. X
Depreciation charges during year	\$1,000.. X
Total rental payments	\$1,000.. X
Buildings and other structures	\$1,000.. D
Machinery and equipment	\$1,000.. D
Total other expenses ⁴	\$1,000.. X
Response coverage ratio ⁵	percent.. X
Repair and maintenance services of buildings and/or machinery ⁴	\$1,000.. X
Communications services ⁴	\$1,000.. X
Legal services ⁴	\$1,000.. X
Accounting, auditing, and bookkeeping services ⁴	\$1,000.. X
Advertising and promotional services ⁴	\$1,000.. X
Expensed computer hardware and supplies and purchased computer services ⁴	\$1,000.. X
Refuse removal (including hazardous waste) services ⁴	\$1,000.. X
Management consulting and administrative services ⁴	\$1,000.. X
Taxes and license fees ⁴	\$1,000.. X
All other expenses ⁴	\$1,000.. X

See footnotes at end of table.

Table 3. Detailed Statistics by Industry: 2002—Con.

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Item	Value
3311114, Iron and steel mills - nonintegrated	
Companies ¹	number.. N
All establishments ²	number.. 316
Establishments with 1 to 19 employees.....	number.. 100
Establishments with 20 to 99 employees.....	number.. 115
Establishments with 100 employees or more.....	number.. 101
All employees ³	number.. 60 338
Total compensation.....	\$1,000.. 4 213 975
Annual payroll.....	\$1,000.. 2 966 203
Total fringe benefits.....	\$1,000.. 1 247 772
Production workers, average for year.....	number.. 46 694
Production workers on March 12.....	number.. 46 887
Production workers on May 12.....	number.. 47 440
Production workers on August 12.....	number.. 46 942
Production workers on November 12.....	number.. 45 449
Production worker hours.....	1,000.. 97 729
Production worker wages.....	\$1,000.. 2 206 937
Total cost of materials.....	\$1,000.. 13 435 374
Materials, parts, containers, packaging, etc., used.....	\$1,000.. 10 839 603
Resales.....	\$1,000.. 136 992
Purchased fuels.....	\$1,000.. 902 558
Purchased electricity.....	\$1,000.. 699 019
Contract work.....	\$1,000.. 857 202
Quantity of electricity purchased for heat and power.....	1,000 kWh.. 20 264 446
Quantity of electricity generated less sold for heat and power.....	1,000 kWh.. D
Total value of shipments.....	\$1,000.. 22 728 279
Primary products value of shipments.....	\$1,000.. X
Secondary products value of shipments.....	\$1,000.. X
Total miscellaneous receipts.....	\$1,000.. X
Value of resales.....	\$1,000.. X
Contract receipts.....	\$1,000.. X
Other miscellaneous receipts.....	\$1,000.. X
Primary products specialization ratio.....	percent.. X
Value of primary products shipments made in all industries.....	\$1,000.. X
Value of primary products shipments made in this industry.....	\$1,000.. X
Value of primary products shipments made in other industries.....	\$1,000.. X
Coverage ratio.....	percent.. X
Value added.....	\$1,000.. 9 199 985
Total inventories, beginning of year.....	\$1,000.. 3 879 929
Finished goods inventories.....	\$1,000.. 1 314 892
Work-in-process inventories.....	\$1,000.. 1 267 990
Materials and supplies inventories.....	\$1,000.. 1 297 047
Total inventories, end of year.....	\$1,000.. 3 947 524
Finished goods inventories.....	\$1,000.. 1 199 768
Work-in-process inventories.....	\$1,000.. 1 290 194
Materials and supplies inventories.....	\$1,000.. 1 457 562
Gross value of depreciable assets (acquisition costs) at beginning of year.....	\$1,000.. X
Total capital expenditures (new and used).....	\$1,000.. X
Buildings and other structures (new and used).....	\$1,000.. X
Machinery and equipment (new and used).....	\$1,000.. X
Automobiles, trucks, etc., for highway use.....	\$1,000.. X
Computers and peripheral data processing equipment.....	\$1,000.. X
All other expenditures for machinery and equipment.....	\$1,000.. X
Total retirements.....	\$1,000.. X
Gross value of depreciable assets at end of year.....	\$1,000.. X
Depreciation charges during year.....	\$1,000.. X
Total rental payments.....	\$1,000.. X
Buildings and other structures.....	\$1,000.. X
Machinery and equipment.....	\$1,000.. X
Total other expenses ⁴	\$1,000.. X
Response coverage ratio ⁵	percent.. X
Repair and maintenance services of buildings and/or machinery ⁴	\$1,000.. X
Communications services ⁴	\$1,000.. X
Legal services ⁴	\$1,000.. X
Accounting, auditing, and bookkeeping services ⁴	\$1,000.. X
Advertising and promotional services ⁴	\$1,000.. X
Expensed computer hardware and supplies and purchased computer services ⁴	\$1,000.. X
Refuse removal (including hazardous waste) services ⁴	\$1,000.. X
Management consulting and administrative services ⁴	\$1,000.. X
Taxes and license fees ⁴	\$1,000.. X
All other expenses ⁴	\$1,000.. X

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Based on Annual Survey of Manufactures (ASM) sample data.

⁵A response coverage ratio is derived for this item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight) for those Annual Survey of Manufactures (ASM) establishments that reported to the weighted total employment for all ASM establishments classified in this industry.

Note 1: The amounts shown for other expenses reflect only those services that establishments purchase from other companies.

Note 2: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 4. Industry Statistics by Employment Size: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Employment size class	E ¹	All establishments ²	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number ³	Payroll (\$1,000)	Number ³	Hours (1,000)	Wages (\$1,000)				
331111, Iron and steel mills											
All establishments	—	373	118 847	6 234 371	93 182	195 764	4 719 850	18 276 894	28 953 463	47 170 847	1 593 365
Establishments with—											
1 to 4 employees	—	28	63	2 087	45	81	1 238	4 511	9 057	14 201	474
5 to 9 employees	1	27	194	7 563	124	209	3 904	15 995	21 639	37 447	5 235
10 to 19 employees	2	45	626	25 401	487	959	19 120	74 644	95 528	167 062	8 828
20 to 49 employees	1	73	2 217	93 440	1 681	3 481	61 564	302 007	460 433	757 164	62 118
50 to 99 employees	—	43	3 002	126 174	2 311	4 872	91 826	297 442	536 033	870 553	32 784
100 to 249 employees	—	51	8 062	359 677	6 013	12 937	242 663	999 459	1 980 880	2 965 458	268 831
250 to 499 employees	—	57	20 736	1 077 788	16 307	34 284	800 539	3 956 809	5 708 841	9 846 974	327 731
500 to 999 employees	—	25	17 444	898 722	13 785	28 637	694 109	3 234 867	5 845 567	9 041 104	464 080
1,000 to 2,499 employees	—	13	22 160	1 159 768	17 473	35 186	861 647	3 525 896	4 584 227	7 889 057	149 744
2,500 employees or more	—	11	44 343	2 483 751	34 956	75 118	1 943 240	5 865 264	9 711 258	15 581 827	273 540
Administrative records ⁴	9	2	b	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. Data are also included in respective size classes shown.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 5. Industry Statistics by Primary Product Class Specialization: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry or product class code	Industry or primary product class	All establishments ¹	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number ²	Payroll (\$1,000)	Number ²	Hours (1,000)	Wages (\$1,000)				
331111	Iron and steel mills	373	118 847	6 234 371	93 182	195 764	4 719 850	18 276 894	28 953 463	47 170 847	1 593 365
3311111	Coke oven and blast furnace products, made in steel mills	16	4 933	250 044	4 167	8 949	205 991	606 556	1 266 696	1 896 927	24 889
3311113	Steel ingots and semifinished shapes and forms, made in steel mills	25	7 531	340 413	5 919	11 941	252 696	1 276 558	1 868 375	3 107 995	86 160
3311115	Hot rolled steel sheet and strip (including tin mill products, tinplate, blackplate, terneplate, and tin-free steel), made in steel mills	44	51 146	2 858 911	40 207	85 714	2 206 499	7 891 372	13 396 673	21 404 026	798 397
3311117	Hot rolled steel bars and bar shapes, plates, structural shapes, and piling (including concrete reinforcing and tool steel bars), made in steel mills	100	29 983	1 581 595	23 655	50 195	1 208 509	4 150 872	6 869 953	10 957 707	436 834
3311119	Steel wire, including galvanized and other coated wire, made in steel mills producing wire rods or hot rolled bars	9	778	35 207	543	1 183	22 034	207 572	228 237	432 120	D
331111B	Steel pipes and tubes, made in steel mills producing semifinished shapes or plate	31	6 334	256 540	4 899	10 003	182 041	676 478	1 061 989	1 724 057	58 402
331111D	Cold rolled steel sheet and strip, made in steel mills producing hot rolled sheet or strip	29	9 259	508 287	7 060	14 537	368 113	2 496 264	3 179 815	5 559 848	108 585
331111F	Cold finished steel bars and bar shapes, made in steel mills producing hot rolled bars and bar shapes	9	3 292	154 499	2 499	4 526	102 547	419 720	433 625	888 825	15 624
331111H	Seamless rolled ring forgings, ferrous, made in steel mills	3	b	D	D	D	D	D	D	D	D
331111J	Open die and smith forgings (hammer and press), ferrous, made in steel mills	10	g	D	D	D	D	D	D	D	17 991
331111L	Other steel mill products, including steel rails, except wire products ...	19	3 131	143 310	2 426	4 927	104 353	359 218	489 554	841 880	31 067

¹Includes establishments with payroll at any time during the year.

²Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6a. **Products Statistics: 2002 and 1997**

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	Number of companies with shipments of \$100,000 or more	Quantity of production for all purposes	Product shipments	
				Quantity	Value (\$1,000)
331111	Iron and steel mills	2002.. N 1997.. N	X X	X X	45 214 808 56 344 117
3311111	Coke oven and blast furnace products, made in steel mills	2002.. N 1997.. N	X X	X X	1 352 018 2 450 291
33111111	Coke oven and blast furnace products, made in steel mills	2002.. N 1997.. N	X X	X X	1 350 201 2 450 291
3311111101	Coke oven products, coke (excluding screenings and breeze), made in steel mills ¹	2002.. 8 1997.. 13	10 792.1 15 161.8	10 613.7 11 299.2	1 094 283 936 742
3311111103	Coke oven products, screenings and breeze, made in steel mills ²	2002.. 13 1997.. 17	1 412.7 41 360.9	S 1 339.3	44 470 72 202
3311111105	Coke oven products, crude tar, made in steel mills ³	2002.. 7 1997.. 12	D D	S P152.4	43 899 78 808
3311111107	Coke oven products, crude light oil, made in steel mills ⁴	2002.. 5 1997.. 11	D D	21.3 46.7	10 695 19 173
3311111109	Coke oven products, other (including tar derivatives, ammonia, light oil derivations, and coke oven gas), made in steel mills ⁵	2002.. 7 1997.. 9	X X	X X	D 169 355
3311111111	Blast furnace pig iron (excluding ferroalloys), including pig iron with silicon content up to and including 6 percent silicon, made in steel mills	2002.. 4 1997.. 6	S D	S D	13 226 D
3311111113	Blast furnace slag, excluding ferroalloys, made in steel mills	2002.. 5 1997.. 7	X D	D D	D D
3311111115	Blast furnace sinter from ore, flue dust, blast furnace gas and other materials (excluding ferroalloys), made in steel mills	2002.. 1 1997.. 4	X X	X X	D 95 923
3311111117	Other blast furnace products, excluding ferroalloys, made in steel mills	2002.. 4 1997.. 6	X D	X D	D D
33111111Y	Coke oven and blast furnace products, made in steel mills, nsk	2002.. N 1997.. N	X X	X X	1 817 -
3311111YWV	Coke oven and blast furnace products, made in steel mills, nsk	2002.. N 1997.. N	X X	X X	1 817 -
3311113	Steel ingots and semifinished shapes and forms, made in steel mills	2002.. N 1997.. N	X X	X X	3 922 246 4 377 169
33111131	Steel ingots and semifinished shapes and forms, made in steel mills	2002.. N 1997.. N	X X	X X	3 922 246 4 377 169
3311113100	Steel ingots and semifinished shapes and forms, made in steel mills ⁶	2002.. 55 1997.. 50	X X	X X	3 922 246 4 377 169
3311115	Hot rolled steel sheet and strip (including tin mill products, tinplate, blackplate, terneplate, and tin-free steel), made in steel mills	2002.. N 1997.. N	X X	X X	17 374 041 22 060 627
33111151	Hot rolled steel sheet and strip (including tin mill products, tinplate, blackplate, terneplate, and tin-free steel), made in steel mills	2002.. N 1997.. N	X X	X X	17 374 041 22 060 627
3311115100	Hot rolled steel sheet and strip (including tin mill products, tinplate, blackplate, terneplate, and tin-free steel), made in steel mills ⁶	2002.. 43 1997.. 39	X X	X X	17 374 041 22 060 627
3311117	Hot rolled steel bars and bar shapes, plates, structural shapes, and piling (including concrete reinforcing and tool steel bars), made in steel mills	2002.. N 1997.. N	X X	X X	10 690 176 13 383 096
33111171	Hot rolled steel bars and bar shapes, plates, structural shapes, and piling (including concrete reinforcing and tool steel bars), made in steel mills	2002.. N 1997.. N	X X	X X	10 690 176 13 383 096
3311117100	Hot rolled steel bars and bar shapes, plates, structural shapes, and piling (including concrete reinforcing and tool steel bars), made in steel mills ⁶	2002.. 94 1997.. 63	X X	X X	10 690 176 13 383 096
3311119	Steel wire, including galvanized and other coated wire, made in steel mills producing wire rods or hot rolled bars	2002.. N 1997.. N	X X	X X	450 708 444 682
33111191	Steel wire, including galvanized and other coated wire, made in steel mills producing wire rods or hot rolled bars	2002.. N 1997.. N	X X	X X	450 708 444 682
3311119100	Steel wire, including galvanized and other coated wire, made in steel mills producing wire rods or hot rolled bars ⁷	2002.. 23 1997.. 18	X X	X X	450 708 444 682
331111B	Steel pipes and tubes, made in steel mills producing semifinished shapes or plate	2002.. N 1997.. N	X X	X X	1 857 073 2 734 679
331111B1	Steel pipes and tubes, made in steel mills producing semifinished shapes or plate	2002.. N 1997.. N	X X	X X	1 857 073 2 734 679
331111B100	Steel pipes and tubes, made in steel mills producing semifinished shapes or plate ⁸	2002.. 45 1997.. 17	X X	X X	1 857 073 2 734 679
331111D	Cold rolled steel sheet and strip, made in steel mills producing hot rolled sheet or strip	2002.. N 1997.. N	X X	X X	8 051 700 8 541 551
331111D1	Cold rolled steel sheet and strip, made in steel mills producing hot rolled sheet or strip	2002.. N	X	X	8 051 700

See footnotes at end of table.

Table 6a. **Products Statistics: 2002 and 1997—Con.**

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	Number of companies with shipments of \$100,000 or more	Quantity of production for all purposes	Product shipments	
				Quantity	Value (\$1,000)
331111	Iron and steel mills—Con.				
331111D	Cold rolled steel sheet and strip, made in steel mills producing hot rolled sheet or strip—Con.				
331111D1	Cold rolled steel sheet and strip, made in steel mills producing hot rolled sheet or strip—Con.				
	1997..	N	X	X	8 541 551
331111D100	Cold rolled steel sheet and strip, made in steel mills producing hot rolled sheet or strip ⁹	2002..	X	X	8 051 700
	1997..	25	X	X	8 541 551
331111F	Cold finished steel bars and bar shapes, made in steel mills producing hot rolled bars and bar shapes	2002..	X	X	714 838
	1997..	N	X	X	935 511
331111F1	Cold finished steel bars and bar shapes, made in steel mills producing hot rolled bars and bar shapes	2002..	X	X	714 838
	1997..	N	X	X	935 511
331111F100	Cold finished steel bars and bar shapes, made in steel mills producing hot rolled bars and bar shapes ¹⁰	2002..	X	X	714 838
	1997..	13	X	X	935 511
		11	X	X	
331111H	Seamless rolled ring forgings, ferrous, made in steel mills	2002..	X	X	D
	1997..	N	X	X	D
331111H1	Seamless carbon steel and alloy steel rolled ring forgings (excluding stainless and hi-temperature), made in steel mills	2002..	X	X	D
	1997..	N	X	X	D
331111H101	Seamless carbon steel and alloy steel rolled ring forgings (excluding stainless and hi-temperature), made in steel mills ¹¹	2002..	X	X	D
	1997..	8	X	X	D
		4	X	X	D
331111H2	Seamless stainless steel and hi-temperature (iron, nickel, or cobalt-base alloy) rolled ring forgings, made in steel mills	2002..	X	X	D
	1997..	N	X	X	D
331111H203	Seamless stainless steel and hi-temperature (iron, nickel, or cobalt-base alloy) rolled ring forgings, made in steel mills ¹²	2002..	X	X	D
	1997..	7	X	X	D
		2	X	X	D
331111HY	Seamless rolled ring forgings, ferrous, made in steel mills, nsk	2002..	X	X	—
	1997..	N	X	X	—
331111HYWV	Seamless rolled ring forgings, ferrous, made in steel mills, nsk	2002..	X	X	—
	1997..	N	X	X	—
331111J	Open die and smith forgings (hammer and press), ferrous, made in steel mills	2002..	X	X	D
	1997..	N	X	X	D
331111J1	Carbon and alloy steel open die and smith forgings (hammer and press), excluding stainless and hi-temperature, made in steel mills	2002..	X	X	D
	1997..	N	X	X	D
331111J101	Carbon and alloy steel open die and smith forgings (hammer and press), excluding stainless and hi-temperature, made in steel mills ¹³	2002..	X	X	D
	1997..	8	X	X	D
		5	X	X	D
331111J2	Stainless steel and hi-temperature (iron, nickel, or cobalt-base alloy) open die and smith forgings (hammer and press), made in steel mills	2002..	X	X	D
	1997..	N	X	X	D
331111J203	Stainless steel and hi-temperature (iron, nickel, or cobalt-base alloy) open die and smith forgings (hammer and press), made in steel mills ¹⁴	2002..	X	X	D
	1997..	7	X	X	D
		2	X	X	D
331111JY	Open die and smith forgings (hammer and press), ferrous, made in steel mills, nsk	2002..	X	X	—
	1997..	N	X	X	—
331111JYWV	Open die and smith forgings (hammer and press), ferrous, made in steel mills, nsk	2002..	X	X	—
	1997..	N	X	X	—
331111L	Other steel mill products, including steel rails, except wire products	2002..	X	X	536 959
	1997..	N	X	X	585 921
331111L1	Other steel mill products, including steel rails, except wire products	2002..	X	X	536 959
	1997..	N	X	X	585 921
331111L100	Other steel mill products, including steel rails, except wire products ⁶	2002..	X	X	536 959
	1997..	30	X	X	585 921
		11	X	X	
331111W	Iron and steel mills, nsk, total	2002..	X	X	26 693
	1997..	N	X	X	42 277
331111WY	Iron and steel mills, nsk, total	2002..	X	X	26 693
	1997..	N	X	X	42 277
331111WYWW	Iron and steel mills, nsk, for nonadministrative-record establishments	2002..	X	X	24 435
	1997..	N	X	X	11 467
331111WYWY	Iron and steel mills, nsk, for administrative-record establishments	2002..	X	X	2 258
	1997..	N	X	X	30 810

¹This product code is primary to more than one industry. See industry 324199, product code 324199111.

²This product code is primary to more than one industry. See industry 324199, product code 324199121.

³This product code is primary to more than one industry. See industry 324199, product code 324199131.

⁴This product code is primary to more than one industry. See industry 324199, product code 324199141.

⁵This product code is primary to more than one industry. See industry 324199, product code 324199151.

⁶For additional detail, see Current Industrial Report MA331B, Steel Mill Products.

⁷For additional detail, see Current Industrial Report MA331B, Steel Mill Products. Also, this product code is primary to more than one industry. See industry 331222, product code 3312225100.

⁸For additional detail, see Current Industrial Report MA331B, Steel Mill Products. Also, this product code is primary to more than one industry. See industry 331210, product code 3312100100.

⁹For additional detail, see Current Industrial Report MA331B, Steel Mill Products. Also, this product code is primary to more than one industry. See industry 331221, product code 331221100.

¹⁰For additional detail, see Current Industrial Report MA331B, Steel Mill Products. Also, this product code is primary to more than one industry. See industry 331221, product code 3312213100.

¹¹This product code is primary to more than one industry. See industry 332111, product code 3321115101.

Table 6a. **Products Statistics: 2002 and 1997—Con.**

¹²This product code is primary to more than one industry. See industry 332111, product code 3321115106.
¹³This product code is primary to more than one industry. See industry 332111, product code 3321117101.
¹⁴This product code is primary to more than one industry. See industry 332111, product code 3321117106.

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6b. Product Class Shipments for Selected States: 2002 and 1997

[Product classes covered are those that are economically significant and whose production is geographically dispersed, provided dispersion is not approximated by data in Table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some states are withheld because they are either less than \$2 million in product class shipments or they disclose data for individual companies in 2002. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographic definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

NAICS product class code	Product class and geographic area	Value of product shipments (\$1,000)
3311111	Coke oven and blast furnace products, made in steel mills	
	United States..... 2002..	1 352 018
	..... 1997..	2 450 291
	Indiana..... 2002..	451 712
	..... 1997..	92 928
	Ohio..... 2002..	5 960
	..... 1997..	687 023
3311113	Steel ingots and semifinished shapes and forms, made in steel mills	
	United States..... 2002..	3 922 246
	..... 1997..	4 377 169
	Indiana..... 2002..	21 587
	..... 1997..	N
	Ohio..... 2002..	687 252
	..... 1997..	1 241 904
3311115	Hot rolled steel sheet and strip (including tin mill products, tinplate, blackplate, terneplate, and tin-free steel), made in steel mills	
	United States..... 2002..	17 374 041
	..... 1997..	22 060 627
	Indiana..... 2002..	5 810 864
	..... 1997..	5 643 207
	Ohio..... 2002..	2 819 912
	..... 1997..	4 416 619
3311117	Hot rolled steel bars and bar shapes, plates, structural shapes, and piling (including concrete reinforcing and tool steel bars), made in steel mills	
	United States..... 2002..	10 690 176
	..... 1997..	13 383 096
	Indiana..... 2002..	959 929
	..... 1997..	1 770 482
	Ohio..... 2002..	1 267 678
	..... 1997..	1 412 165
	Texas..... 2002..	925 174
	..... 1997..	1 337 754
3311119	Steel wire, including galvanized and other coated wire, made in steel mills producing wire rods or hot rolled bars	
	United States..... 2002..	450 708
	..... 1997..	444 682
331111B	Steel pipes and tubes, made in steel mills producing semifinished shapes or plate	
	United States..... 2002..	1 857 073
	..... 1997..	2 734 679
	Indiana..... 2002..	125 448
	..... 1997..	N
	Ohio..... 2002..	758 180
	..... 1997..	1 170 208
331111D	Cold rolled steel sheet and strip, made in steel mills producing hot rolled sheet or strip	
	United States..... 2002..	8 051 700
	..... 1997..	8 541 551
	Indiana..... 2002..	3 282 961
	..... 1997..	3 325 509
	Ohio..... 2002..	492 118
	..... 1997..	1 205 621
331111F	Cold finished steel bars and bar shapes, made in steel mills producing hot rolled bars and bar shapes	
	United States..... 2002..	714 838
	..... 1997..	935 511
331111H	Seamless rolled ring forgings, ferrous, made in steel mills	
	United States..... 2002..	D
	..... 1997..	D
331111J	Open die and smith forgings (hammer and press), ferrous, made in steel mills	
	United States..... 2002..	D
	..... 1997..	D
331111L	Other steel mill products, including steel rails, except wire products	
	United States..... 2002..	536 959
	..... 1997..	585 921

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 7. Materials Consumed by Kind: 2002 and 1997

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Material code	Material consumed	Quantity	Delivered cost (\$1,000)
331111	Iron and steel mills		
0090001	Total materials .....2002..	X	23 635 359
	.....1997..	X	26 731 637
32741009	Dead-burned dolomite fluxes .....2002..	X	87 538
	.....1997..	X	89 844
32799209	Fluorspar fluxes .....2002..	X	8 855
	.....1997..	X	10 120
32799211	Other fluxes .....2002..	X	125 370
	.....1997..	X	132 486
32700013	All other stone, clay, glass, and concrete products .....2002..	X	11 555
	.....1997..	X	14 029
32500011	Industrial chemicals (excluding sulfuric acid and oxygen) .....2002..	X	92 474
	.....1997..	X	87 206
32512003	Oxygen (including high and low purity) .....2002..	X	349 944
	.....1997..	X	425 858
32518802	Sulfuric acid, new and spent (100 percent H2SO4) .....2002..	X	D
	.....1997..	X	N
32500039	All other chemicals and allied products .....2002..	X	48 817
	.....1997..	X	31 965
21221011	Mining crude iron ore and iron ore concentrates, including pelletized and manganiferous (gross weight) .....1,000 s tons..2002..	41 689.2	1 688 479
	.....1997..	32 342.2	1 351 456
21221009	Mining iron ore agglomerates, including pelletized and manganiferous (gross weight) .....1,000 s tons..2002..	S	593 032
	.....1997..	52 003.3	1 893 821
21229901	Mining manganese ore (including 10 percent manganese) and ferroalloy ore .....2002..	X	25 907
	.....1997..	X	23 056
21220013	All other metal mining .....2002..	X	D
	.....1997..	X	-
21211001	Coal used in the production of coke .....1,000 s tons..2002..	920 514.0	1 061 465
	.....1997..	28 355.4	1 379 566
00190023	Iron and steel scrap, excluding home scrap .....1,000 s tons..2002..	S	5 252 169
	.....1997..	48 134.3	6 160 824
00190053	Direct-reduced iron (DRI) .....1,000 s tons..2002..	672.9	66 658
	.....1997..	929.2	116 007
33120045	Pig iron shapes and forms (excluding silvery iron, castings, forgings, and fabricated metal products) .....1,000 s tons..2002..	7 245.5	1 000 058
	.....1997..	2 568.8	692 283
32410017	Lubricating oils and greases and other petroleum products .....2002..	X	134 237
	.....1997..	X	165 672
33350003	Industrial dies, molds, jigs, and fixtures .....2002..	X	93 032
	.....1997..	X	69 374
33599103	Carbon and graphite electrodes .....2002..	X	247 447
	.....1997..	X	916 599
33120075	All other steel shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	3 986 414
	.....1997..	X	3 654 876
33111203	Ferromanganese, silicomanganese, and manganese shapes and forms (excluding castings, forgings, and fabricated metal products) .....1,000 s tons..2002..	9621.1	321 428
	.....1997..	654.7	404 289
33111205	Ferrochromium shapes and forms (excluding castings, forgings, and fabricated metal products) .....1,000 s tons..2002..	S	146 890
	.....1997..	217.5	162 456
33111207	Ferrosilicon (more than 8 percent silicon) shapes and forms (excluding castings, forgings, and fabricated metal products) .....1,000 s tons..2002..	S	96 229
	.....1997..	155.5	120 807
33111209	Ferrovandium .....1,000 s tons..2002..	S	40 519
	.....1997..	5.9	78 248
331000AE	All other ferrous shapes and forms (excluding castings, forgings, and fabricated metal products) .....1,000 s tons..2002..	S	153 481
	.....1997..	P76.1	124 642
33100038	Aluminum and aluminum-base alloy shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	223 264
	.....1997..	X	N
33141933	Nickel (excluding ferronickel) shapes and forms (excluding castings, forgings, and fabricated metal products) .....1,000 s tons..2002..	S	173 504
	.....1997..	37.8	231 389
33141939	Tin shapes and forms (excluding castings, forgings, and fabricated metal products) .....1,000 s tons..2002..	P10.4	47 414
	.....1997..	8.1	45 873
33149105	Zinc and zinc-base alloy shapes and forms (excluding castings, forgings, and fabricated metal products) .....1,000 s tons..2002..	S	241 078
	.....1997..	P208.1	262 653
33141905	All other nonferrous shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	149 551
	.....1997..	X	N
33151103	Gray iron ingot molds and stools .....2002..	X	19 464
	.....1997..	X	29 352
33151007	All other iron and steel castings .....2002..	X	238 573
	.....1997..	X	149 742
32712400	Clay refractories .....2002..	X	202 557
	.....1997..	X	243 958
32712500	Nonclay refractories .....2002..	X	161 056
	.....1997..	X	223 997
32741007	Lime fluxes, including quicklime .....2002..	X	256 785
	.....1997..	X	311 765
32799207	Limestone fluxes .....2002..	X	51 603
	.....1997..	X	381 668
33120081	Steel rod, for wiredrawing .....1,000 s tons..2002..	S	381 652
	.....1997..	D	D
33120067	Steel wire, for redrawing .....1,000 s tons..2002..	S	24 901
	.....1997..	D	D
33111201	Other ferroalloy shapes and forms (including silvery iron, ferrotungsten, ferromolybdenum, ferronickel, etc.) .....1,000 s tons..2002..	250.7	303 322
	.....1997..	222.7	258 808
00970099	All other materials and components, parts, containers, and supplies .....2002..	X	5 205 416
	.....1997..	X	5 418 354
00971000	Materials, ingredients, containers, and supplies, nsk .....2002..	X	292 309
	.....1997..	X	874 082

See footnotes at end of table.

Table 7. **Materials Consumed by Kind: 2002 and 1997—Con.**

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.